

## **SIEC Briefing Paper on Lack of Coverage Issues**

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### **Description**

Public safety officials depend upon reliable communications systems to safeguard life and protect property. The ability for a public safety official to communicate with their dispatch centers is a lifeline to their personal and public safety. The SIEC Advisory Working Group will investigate coverage issues for state agencies and how they can affect public safety.

### **Recommendations to the Committee:**

No recommendation. This is an informational report only.

### **Status**

The SIEC Advisory Working Group will be working on this issue and will provide a report to the Committee at the June meeting.

### **Issues**

None

### **Background**

There are always concerns when there is a lack of radio coverage that may put the public or an officer in harm's way. There are areas in this state where, either due to terrain, or business drivers, radio coverage is less than adequate. The SIEC Advisory Work Group has begun identifying areas that experience this problem.

With over 68,000 square miles and an elevation that varies between sea level and 14,410 feet, the State of Washington faces a series of very serious challenges in providing radio coverage to the entire state. As the state's radio coverage increases closer to 100%, the costs associated with the coverage increase significantly. At a certain point, the price of coverage versus the amount of use is so high as to create business issues surrounding the costs of the investments.

As radio networks are built, they are designed to achieve a certain level of communications coverage. Due mostly to the high cost, perfect communications networks are rarely seen. In Washington State, the typical "best practice" is to create mobile radio coverage for 95% of a jurisdiction. Because each state agency has different jurisdictions according to its mission, most of the state roads and lands have adequate coverage using the guidelines mentioned.

The Technical Implementation Plan (TIP) will include a plan to create mobile radio coverage for 95% of Washington State, and this figure is considered by many as the optimum point before there is a diminished return on investments. Federal Engineering will assist the SIEC Advisory Working Group in the creation of a matrix that will help in determining relative cost and return when investing in additional radio coverage.

There are several factors to consider.

- Roads that are only open during summer months may have less radio coverage than roads open all year around.
- Roads with more traffic will generally have better coverage than roads with little traffic.
- Areas where the Washington State Patrol and the Washington Department of Transportation conduct business will have the best coverage.

- Areas not patrolled by the Washington State Patrol and not under the jurisdiction of the Washington State Department of Transportation or the Department of Natural Resources will not have radio coverage.
- Some areas of our state (federal parks as an example) will typically have no state radio coverage but may be patrolled by the Department of Fish and Wildlife. This is problematic as the Department of Fish and Wildlife uses the Washington State Patrol's network to communicate with their officers. This lack of coverage is potentially hazardous to officers who may need assistance while conducting their mission.

The SIEC Advisory Working Group discussed this matter during both the December and January meetings. The SAW Group is planning to create a matrix for the SIEC's approval. Federal Engineering agreed to assist in this effort. The matrix will help prioritize areas of concern, identify the best way to address each of those problem areas, and apply funding (as it becomes available) to help mitigate these issues.